



Healthy Beginnings at Home

Recommendation for Model Replication

Introduction

Franklin County, Ohio faces high infant mortality rates. Two families lose a baby every week—a statistic that disproportionately impacts Black babies who are dying at nearly 2.5x the rate of white babies. This disparity is the result of a myriad of factors that influence the health of a woman over her lifetime.

In 2017, CareSource funded a micro pilot - Care Homes. Care Homes was a housing strategy for 10 pregnant women experiencing housing instability. CareSource provided rental assistance in an attempt to decrease infant mortality and increase health outcomes. All 10 babies were born full term and celebrated their first birthday. Only one baby was born with a low birth weight. Based on the success of Care Homes, area partners came together to replicate the model.

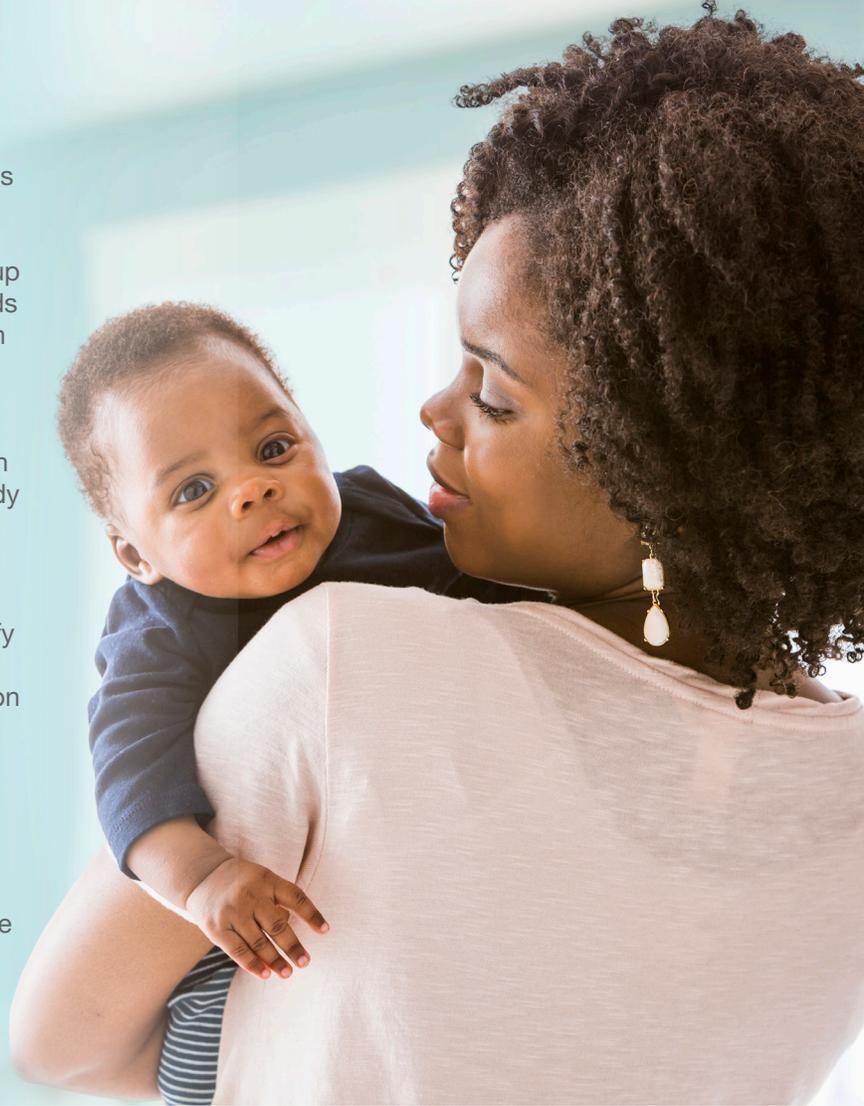
In 2018, CareSource, CelebrateOne, and Nationwide Children's Hospital, along with other community partners, received funding from the Ohio Housing Finance Agency for Healthy Beginnings at Home (HBAH). The purpose of HBAH is to improve maternal and infant health outcomes through the provision of housing stabilization services and rental assistance. The program seeks to strengthen the evidence regarding the impact of stable housing in addressing infant mortality, prematurity and improving health outcomes for women and their infants.

Intervention

HBAH recruited 100 eligible women and their households (children, partners, etc.) from Franklin County, Ohio to either participate in the HBAH housing and case management program, or to act as part of a control group that receives services available to any eligible households in the community. All 100 families were recruited through a single process. After being determined as eligible for HBAH, a random assignment process designated 50 households to the HBAH program group (intervention) and 50 households to the control group. The intervention group received community-based services, rental subsidy and housing stabilization services for up to a two-year period to lay the groundwork for long term housing stability.

Housing stabilization services helped participants identify housing, negotiate with landlords, and remain securely housed when faced with challenges. Housing stabilization were coordinated by a dedicated housing stabilization specialist and services included:

- ✓ Family Critical Time Intervention (CTI)
- ✓ Housing First approach
- ✓ Clinical best practices: person-centered planning, motivational interviewing, and trauma-informed care
- ✓ Access to a CelebrateOne Community Health Workers, a CareSource Care Manager, and a CareSource JobConnect™ Life Coach



Results

Birth Outcomes

	Intervention	Control
Number of fetuses	51	48
Live births	51	44
Pre-term and low birth weight	5	5
Pre-term and healthy birth weight	4	8
Full-term and low birth weight	2	6
Full term and healthy birth weight	40	24
Missing Data	0	1

Conclusion: there was no significant difference between groups in fetal mortality, preterm birth of low birth weight, as noted above. This does not mean statistically the intervention was not effective, however, it is valuable information needed for a future, adequately powered trial.



Length of NICU stay

- The average length of stay (LOS) for well newborns in both groups was **2 days**.
- The average LOS for a sick newborn in the intervention group was **8 days** compared to **29 days** in the control group.
- The intervention group did not have any LOS greater than **17 days**, while the control group had **5 cases**.



Reduced utilization

- Emergency hospital stays reduced by **15%** prior to delivery
- The NICU average duration of stay was reduced by **72%** (intervention group from 8 days vs control 29)
- Newborns placed in NICU were reduced by **60%** (33% vs 13%)
- 30-day readmission rates for the intervention group were **less than** the control group (4.3% vs 12.8%, respectively)



Medical spend

- Total Spend was **\$432.78** for Intervention vs **\$1,110.03** PMPM for Control. (with outliers)
- Total Spend was **\$350.54** PMPM for Intervention vs **\$646.00** per member per month for Control (without outliers)

NB Type	Total			Control			Intervention		
	Claim Count	Pd Dollars	PMPM	Claim Count	Pd Dollars	Avg Pd/Clm	Claim Count	Pd Dollars	Avg Pd/ Clm
Sick NB	19	\$922,584	\$1,744	13	\$827,494	\$63,653	6	\$95,090	\$15,848
Well NB	68	\$156,001	\$295	27	\$54,887	\$2,033	41	\$101,114	\$2,466
Not Stated	1	\$0	\$0	1	\$0	\$0	0	\$0	\$0
Total	88	\$1,078,585	\$2,039	41	\$882,381	\$21,521	47	\$196,204	\$4,175

Replication of Model

4 Key Findings for Successful Replication

- 1 **Cross sectional partnership is essential:** The partnership between housing and health organizations was extremely beneficial, both to the organizations and participant families. All the contributing organizations remained committed to HBAH throughout the project. Together, the partners were able to generate new resources for families and to learn from each other’s perspectives.
- 2 **Resilient participants formed strong relationships with Housing Stability Specialists, a critical component of the program:** Despite the many challenges in their lives, participants made the most of HBAH resources, including active engagement with education and employment programs, workshops and behavioral health treatment. In interviews, several mothers expressed a positive outlook and a renewed sense of hope that HBAH had given them the opportunity to help their children grow up healthy and safe.
- 3 **Rental assistance is critical, but not sufficient:** Given the challenges of being a pregnant woman with a low income trying to find an affordable apartment in Franklin County, the rental assistance provided by HBAH set the foundation for family stability. Housing Stability Specialists helped participants find apartments and support landlord relationships.
- 4 **Racism, trauma and violence must be addressed:** Most participants (92%) were Black. Historical and contemporary racist housing policies, residential segregation and neighborhood disinvestment all serve as significant external barriers to housing stability and positive health outcomes.

Recommendation for Replication

1. Provide pregnant women without stable housing with a safe and affordable place to live for as long as possible, including use of subsidized rent vouchers.
2. Provide intensive housing stabilization services, including landlord advocacy, utility assistance, rental assistance and person-centered care coordination.
3. Support long-term family self-sufficiency through education, training, job coaching and services linkages to access to high quality childcare.
4. Formalize and fund collaboration between organizations with different strengths and expertise.
5. Cultivate relationships to leverage a diverse range of public and private funding.
6. Engage research and advocacy partners to build the evidence base for housing and health programs and to elevate the affordable housing crisis on local, state and national policy agendas.



Key Partners in Healthy Beginnings at Home (HBAH)

- CelebrateOne, a community-wide, collective impact initiative that aims to reduce the Franklin County infant mortality rate and the disparity gap between Black and White infant deaths by 2020, serves as HBAH lead agency and provides a program manager and a community health worker dedicated to HBAH participants.
- Columbus Metropolitan Housing Authority (CMHA), a public housing agency owns over 2,200 units throughout Franklin County and provides housing choice vouchers to an additional 13,500 households living in private sector apartments, administers HBAH rental assistance.
- Homeless Families Foundation (HFF), a nonprofit organization that serves over 400 homeless families through homelessness prevention and rapid rehousing programs in Franklin County, provides HBAH housing stabilization services through master-level social workers.
- CareSource, a nonprofit, managed care company that serves 2 million low-income people across 5 states with headquarters in Dayton, Ohio, provides care coordination through a nurse case manager and life coaching services through a team of social workers to HBAH families. CareSource is also providing claims data for the HBAH health outcomes evaluation. CareSource Foundation® provided the initial grant to launch HBAH.
- Nationwide Children's Hospital, an academic pediatric medical center with a strong research institute is leading the health outcomes evaluation.
- Children's HealthWatch, a national nonpartisan network of pediatricians, public health researchers and children's health and policy experts, serves as an HBAH advisor on research, policy and practices.
- Other project and evaluation support is being provided by Health Policy Institute of Ohio which is conducting the HBAH process evaluation, Dr. Stephen Metraux, University of Delaware Center for Community Research and Service, who is conducting the HBAH housing outcomes evaluation, StepOne which assisted with outreach and screening, and Barbara Poppe, a national expert on homelessness and housing.

